REMARKS

I. Introduction

Claims 1-29 are pending in the current application. In the Office Action dated April 20, 2006, the Examiner objected to claim 21 due to an informality. Additionally, claims 1, 4, 6, 8, 9, 12, 14, 15, 17-19, 21 and 22 under 35 U.S.C. § 103(a) as being unpatentable over C. Rigney, RFC 2865 – Remote Authentication Dial In User Service (RADIUS), (2000), http://www.faqs.org/rfcs/rfc2865.html ("Rigney") in view of U.S. Pat. No. 6,151,628 ("Xu") and U.S. Pat. No. 6,430,619 ("Sitaraman"). Further, claims 2, 3, 5, 7, 10, 11, 13, 16, and 20 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Rigney in view of Laursen, Sitaraman, and U.S. Pat. No. 5,113,499 ("Ankney"). In this Amendment, Applicants have amended claim 21. Applicants respectfully request reconsideration and withdrawal of the rejections to the claims.

II. Claim 21

The Examiner objected to claim 21 due to an informality. In this Amendment, claim 21 has been amended to remove the informality. Applicants respectfully request reconsideration and withdrawal of the objection to claim 21.

III. The Proposed Combinations Do Not Render Claim 1 Unpatentable

Claim 1 is directed to a method for providing a line identifier to a digital subscriber line ("DSL") internet service provider. Claim 1 recites associating a line identifier with a port assigned to a subscriber of DSL internet service for the purpose of authenticating a service request for DSL internet service based on the line identifier. Rigney, Xu, Sitaraman, and Ankney all fail to disclose at this element.

There appears to be no dispute that Rigney and Sitarman fail to disclose associating a line identifier with a port assigned to a subscriber of DSL internet service for the purpose of authenticating a service request for DSL internet service based on the line identifier. The Examiner has admitted that Rigney fails to disclose associating a line identifier with a port assigned to a subscriber wherein the line identifier is usable to authenticate a service. Further, the portion of Sitaraman cited by the Examiner only discloses authenticating a user for DSL service based on a username and a password.

In an attempt to cure the deficiency, the Examiner has cited Xu. However, Xu also fails to disclose associating a line identifier with a port associated to a **subscriber of DSL service** for the purpose of **authenticating a service request for DSL service** based on the line identifier.

Xu is directed to a method for connecting a source of digital data to a computer network. Xu discloses the use of a RADIUS server that may authenticate wireless equipment based on parameters including a telephone number associated with the wireless equipment. However, Xu does not disclose associating a line identifier with a port associated to a subscriber of DSL service for the purpose of authenticating a service request for DSL service based on the line identifier.

Like Xu, Ankney also fails to disclose associating a line identifier with a port assigned to a subscriber of DSL internet service for the purpose of authenticating a service request for DSL service based on the line identifier. Ankney is directed to a security access management system for a packet switched data communications network. Ankney is not directed to DSL networks and does not disclose associating line identifiers with ports assigned to subscribers of DSL service.

To establish a prima facie case of obviousness, the combined references must teach or suggest each claim limitation. (See MPEP § 2142). None of the references cited by the Examiner disclose associating a line identifier with a port assigned to a subscriber of DSL service for the purpose of authenticating a service request for DSL service based on the line identifier as in claim 1. Thus, the combinations of Rigney, Xu, Sitaraman, and Ankney as contemplated by the Examiner necessarily do not render independent claim 1, or any claim that depends on claim 1, unpatentable. Applicants respectfully request reconsideration and withdrawal of the rejections to the claims.

IV. The Proposed Combinations Do Not Render Claim 4 Unpatentable

Claim 4 is directed to a method for authenticating a subscriber request for DSL internet service. Claim 4 recites a line identifier corresponding to a port of a remote server on which a request for DSL internet service is received that is used to authenticate a service request for DSL internet service. As discussed above, Rigney,

Xu, Sitaraman, and Ankney all fail to disclose a line identifier associated with a port assigned to a subscriber of DSL service that is used for authenticating a service request for DSL service. For at least this reason, the proposed combinations of Rigney, Xu, Sitaraman, and Ankney as contemplated by the Examiner necessarily do not render independent claim 4, or any claim that depends on claim 4, unpatentable. Applicants respectfully request reconsideration and withdrawal of the rejections to the claims.

V. The Proposed Combinations Do Not Render Claim 9 Unpatentable

Claim 9 is directed to a system for providing a line identifier to a DSL internet service provider. Claim 9 recites means for associating a line identifier with a port assigned to a subscriber of DSL internet service for the purpose of authenticating a service request for DSL internet service based on the line identifier. As discussed above, Rigney, Xu, Sitaraman, and Ankney all fail to disclose associating a line identifier with a port assigned to a subscriber of DSL service for the purpose of authenticating a service request for DSL service based on the line identifier. For at least this reason, the proposed combinations of Rigney, Xu, Sitaraman, and Ankney as contemplated by the Examiner necessarily do not render independent claim 9, or any claim that depends on claim 9, unpatentable. Applicants respectfully request reconsideration and withdrawal of the rejections to the claims.

VI. The Proposed Combinations Do Not Render Claim 12 Unpatentable

Claim 12 is directed to a remote access server. Claim 12 recites a management interface for associating a line identifier with a port for communication with a subscriber of DSL internet service and a DSL internet service provider operative to authenticate a service request for DSL internet service based on the line identifier associated with the port. As discussed above, Rigney, Xu, Sitaraman, and Ankney all fail to disclose associating a line identifier with a port assigned to a subscriber of DSL service for the purpose of authenticating a service request for DSL service based on the line identifier. For at least this reason, the proposed combinations of Rigney, Xu, Sitaraman, and Ankney as contemplated by the Examiner necessarily do not render independent claim

12, or any claim that depends on claim 12, unpatentable. Applicants respectfully request reconsideration and withdrawal of the rejections to the claims.

VII. The Proposed Combinations Do Not Render Claim 17 Unpatentable

Claim 17 is directed to a system for accessing a network service. Claim 17 recites an access service including a port for communication with a subscriber unit via a DSL internet connection and for associating a line identifier with the subscriber unit and a DSL internet service provider authorizing access to a network service only when the subscriber unit sends a DSL internet service request for the network service through a port associated with the line identifier. As discussed above, Rigney, Xu, Sitaraman, and Ankney all fail to disclose associating a line identifier with a port assigned to a subscriber of DSL service for the purpose of authenticating a service request for DSL service based on the line identifier. For at least this reason, the proposed combinations of Rigney, Xu, Sitaraman, and Ankney as contemplated by the Examiner necessarily do not render claim 17, or any claim that depends on claim 17, unpatentable. Applicants respectfully request reconsideration and withdrawal of the rejections to the claims.

VIII. The Proposed Combinations Do Not Render Claim 21 Unpatentable

Claim 21 is directed to a computer-usable medium storing a computer program for directed a programmable device to perform a method for providing a line identifier to a digital subscriber line ("DSL") internet service provider. Claim 21 recites associating a line identifier with a port assigned to a subscriber of DSL internet service for the purpose of authenticating a service request for DSL internet service based on the line identifier. As discussed above, Rigney, Xu, Sitaraman, and Ankney all fail to disclose associating a line identifier with a port assigned to a subscriber of DSL service for the purpose of authenticating a service request for DSL service based on the line identifier. For at least this reason, the proposed combinations of Rigney, Xu, Sitaraman, and Ankney as contemplated by the Examiner necessarily do not render independent claim 21, or any claim that depends on claim 21, unpatentable. Applicants respectfully request reconsideration and withdrawal of the rejections to the claims.

IX. The Proposed Combinations Do Not Render Claim 22 Unpatentable

Claim 22 is directed to a system for providing access to a network service. Claim 22 recites a remote access server including a port for communicating with a DSL internet subscriber via a DSL internet connection and a management interface for associating a line identifier with the DSL internet subscriber unit, and a DSL service provider that authorizes access to the DSL internet network service only when a subscriber request for the network service is sent through a port associated with the line identifier. As discussed above, Rigney, Xu, Sitaraman, and Ankney all fail to disclose associating a line identifier with a port assigned to a subscriber of DSL service for the purpose of authenticating a service request for DSL service based on the line identifier. For at least this reason, the proposed combinations of Rigney, Xu, Sitaraman, and Ankney as contemplated by the Examiner necessarily do not render independent claim 22, or any claim that depends on claim 22, unpatentable. Applicants respectfully request reconsideration and withdrawal of the rejections to the claims.

X. CONCLUSION

In view of the foregoing amendment and remarks, Applicants submit that the pending claims are in condition for allowance.¹ Reconsideration is therefore respectfully requested. If there are any questions concerning this Response, the Examiner is asked to phone the undersigned attorney at (312) 321-4200.

Respectfully submitted,

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¹ Please note that further to the conversation between the Examiner and Scott W. Brim on December 8, 2005, it is Applicants' understanding that the objection to the drawings is being held in abeyance.